REMARKS

THE CLAIM AMENDMENTS

The wherein clause of the independent claims, i.e., claims 1, 50, 53, and 54, has been amended to recite that after incorporation of the active agent, the matrix is compressed to form a tablet. Support for the new recitation is found in the specification at *inter alia*, page 36, lines 2-5 and Example 1, page 43, lines 17-19. Minor amendments have also been made to claims 50-53 to more fully define the invention. New claims 55 and 56 have been amended to specify that the polyalkylene oxide polymers or copolymers of claims 50-54 are poly(ethylene oxide). Support for the recitation that the polyalkylene oxide polymers may be poly(ethylene oxide) is in the specification at *inter alia*, at page 18, line 9; page 20, lines 3-6; and page 22, lines 5-6. In addition to the foregoing, "ciprofloxacin hydrochloride" has been removed from claim 34, which is directed to active agents that are water soluble but rendered sparingly water soluble by a vesicle, and added to claim 23, which is directed to active agents having an aqueous solubility of less than about 10 wt.% at 20°C. Support for the change in location of "ciprofloxacin hydrochloride" is found in the specification at *inter alia* page 5, lines 9-16; page 9, lines 15-20; page 24, lines 1-2; and page 25, line 4.

No new matter has been added to the application with the claim amendments set forth herein.

102(b) ANTICIPATION REJECTION - SHELL 1

Claim 1-9, 12-16, 18-23, 26-34, 36, 37, 39, 40, and 45-54 stand rejected under 35 U.S.C. § 102(b) as anticipated by Shell et al. (USPN 5,972,389; "Shell 1").

Shell 1, which is owned by the assignee of the present invention, teaches an erodible, gastric-retentive drug dosage form for releasing sparingly soluble drugs into the stomach, the drug dosage form comprising *a plurality of solid particles or pellets of a solid-state drug dispersed within a polymer* (col. 1, ll. 47-52; col. 1, l. 64 to col. 2, l. 2). The solid particles or pellets are formed into a packed mass for ingestion and are encapsulated as hard filled capsules or soft elastic capsules with each unit dose containing from 2 to 5 spherical or cylindrical pellets (col. 8, ll. 45-63). Under the Shell 1 dosage form, the encapsulating material must be highly soluble in gastric fluid so that the particles are rapidly dispersed in the stomach after the capsule is ingested (col. 8, ll. 50-52). Once dispersed, the plurality of particles will erode during the dosing period (col. 8, ll. 43-45).

As explained at page 2 of the specification of the instant application, the dosage form of Shell 1 was formulated using USP Dissolution Testing. Using this test, the optimum dosage form of Shell 1 was found to be the multiple particle dosage form, which is designed to release a plurality of particles into the

gastric cavity, which subsequently swell and release active agent. By switching the testing from the USP Dissolution Test to the USP Disintegration Test, the present inventors found that the plurality of particles model of Shell 1 was no longer necessary in order to formulate a gastric-retentive oral dosage form - the result being the claims dosage form, which is comprised of a solid dosage form comprised of active agent incorporated in a polymer matrix.

Although Shell 1 claims (claims 2 and 32) that the dosage form may be in the form of a tablet, claim 1 and the specification are clear that the tablet *must include the plurality of pellets or particles*; the specification emphasizes that the tablets, like the capsules, maintain the solid particles in a packed mass prior to their ingestion and that upon ingestion, the tablet or capsule rapidly dissolve or disintegrate upon contact with the gastric fluid to permit the particles to disperse in the stomach (col. 2, ll. 9-14). Shell 1, however, does not give any examples of the tablets of claims 2 and 32 in the specification; rather, the examples of Shell describe the individual pellets as tablets, all of which are encapsulated in gelatin capsules (*See*, Example 3, col. 12, ll. 13-23; Example 4, col. 12, ll. 31-32; Example 5, col. 13, ll. 20-23; Example 6, col. 13, ll. 35-36; and Example 7, col. 14, ll. 9-17).

To emphasize that the claimed dosage form is not comprised of a plurality of pellets or particles, the independent claims have been amended to recite that after incorporation of the active agent, the matrix is compressed to form a tablet.

Because Shell 1 does not teach or suggest a dosage form that is not comprised of a plurality of particles or pellets, it follows that Shell 1 does not anticipate the claimed invention. In light of the foregoing, applicants respectfully request withdrawal of this rejection.

102(b) ANTICIPATION REJECTION - SHELL 2

Claims 1-7, 10, 12, 17-23, and 45-49 stand rejected under 35 U.S.C. § 102(b) as anticipated by Shell (USPN 5,007,790); "Shell 2").

Shell 2 teaches an oral dosage form that provides sustained and controlled release of drug comprised of a plurality of solid particles of a solid state drug dispersed within a hydrophilic, water swellable polymer (col. 1, ll. 54-58).

As the dosage form of Shell 2 is also premised on the plurality of particles, the arguments distinguishing Shell 1 also apply to distinguish Shell 2. Because Shell 2 does not anticipate or render obvious the claimed invention for the reasons set forth in the traversal to the Shell 2 reference, applicants respectfully request withdrawal of this rejection.

102(b) ANTICIPATION REJECTION - UEMURA ET AL.

Claims 1-7, 10, 17-22, and 39 stand rejected under 35 U.S.C. § 102(b) as anticipated by Uemura et al. (USPN 4,695,467).

Uemura et al. teaches a sustained release tablet comprised of disintegrable granules containing drug, a disintegrating agent, and a water soluble polymer that are covered in wax (Abstract; col. 3, ll. 1-44; col. 3, l.67 to col. 4, ll. 29). The tablet of Uemera et al. release active agent when water penetrates the surface layer of the tablet such that the wax-treated granules within the surface layer of the tablet swell gradually and finally break through the surrounding wall of wax thus separating from the surface layer of the tablet so that the drug gets released therefrom because the granules are easily disintegrable.

Unlike the dosage form of the claimed invention where the tablet itself swells to a size that facilitates gastric retention, the tablet of Uemura et al. does not undergo any swelling, rather, it is the granules within the surface layer of the tablet that swell thereby releasing the active agent from the granules; accordingly, *there is no gastric retention with the dosage form of Uemura et al.* Further, like the dosage forms of Shell 1 and Shell 2, the dosage form of Uemura et al. is not comprised of active agent in a polymer matrix that is compressed into a tablet that swells in the presence of gastric fluid; rather, it is comprised of granules within a dosage form that swell enough to break through the encapsulation of the dosage form in order to release active agent.

In light of the foregoing, Uemura et al. does not anticipate or render obvious the claimed invention for the following reasons: (i) like the dosage forms in the Shell 1 and Shell 2 references, the dosage form of Uemura et al. is not a solid dosage form, rather, it is comprised of a plurality of discreet granules that are encapsulated to form a unit dose; and (ii) the unit dose of Uemura et al. does not swell in such a manner to promote gastric retention.

Because Uemura et al. does not anticipate or render obvious the claimed invention, applicants respectfully request withdrawal of this rejection.

102(e) ANTICIPATION REJECTION - VANDECRUYS ET AL.

Claims 1, 6-8, 10, 11, 23-25, 30, 34, and 35 stand rejected under 35 U.S.C. § 102(e) as anticipated by Vandecruys et al. (USPN 6,667,069). This rejection is respectfully traversed.

Vandecruys et al. teaches a hydrophilic controlled release formulation comprised of pregelatinized starch, one or more active ingredients, and one or more viscous hydrophilic polymers (col. 1, ll. 18-21). Preferred hydrophilic polymers of the Vandecruys et al. dosage form are hydroxypropyl cellulose and hydroxypropyl methylcellulose (col. 1, ll. 22-23). *The formulation of Vandecruys et al. is not gastric retentive.* Indeed, nowhere in Vandecruys et al. is the term "gastric-retentive" mentioned.

Further, at col. 11, lines 24-29, Vandecruys et al. discloses that when the controlled release formulation disclosed therein passes through the gastrointestinal (GI) tract, the formulation resides for a substantial period of time in the lower part of the GI tract, i.e., the ileum and the colon.

Notwithstanding the foregoing, because the Vandecruys et al. reference is a reference cited under 35 U.S.C. § 102(e), this reference may be eliminated as prior art to the present invention with evidence that the present invention predates the September 28, 2001, international filing date of the Vandecruys et al. reference. Such evidence may be in the form of inventor declarations filed under 37 C.F.R. § 1.131. Attached to the end of this paper are the Declaration of Inventor Jenny Louie-Helm and the Declaration of Bret Berner, Ph.D., both of which provide evidence that the present invention predates not only the September 29, 2001, international filing date of the Vandecruys et al. reference, but also the March 24, 2000, filing date of the PCT application that gave rise to the '060 Patent.

Because the present invention predates Vandecruys et al. as evidenced by the attached Declarations under 37 C.F.R. § 1.131, applicants respectfully request withdrawal of this rejection.

CONCLUSION

The foregoing discussion addresses and overcomes each of the Examiner's rejections to the claimed invention. Because there will be no outstanding issues in the instant application upon entry of this Amendment, applicants respectfully request withdrawal of all outstanding rejections for this application and passage of this application to allowance.

If the Examiner has any questions regarding this Amendment that may be addressed by way of a telephone call or e-mail correspondence, she is encouraged to contact the undersigned at 650-330-4913 or at canaan@reedpatent.com.

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Jenny Louie-Helm et al.

Confirmation No.: 1055

Serial No.: 10/014,750

Group Art Unit: 1615

Filing Date: October 25, 2001

Examiner: Blessing M. Fubara

Title: FORMULATION OF AN ERODIBLE, GASTRIC RETENTIVE ORAL DOSAGE FORM USING IN VITRO DISINTEGRATION TEST DATA

DECLARATION UNDER 37 C.F.R. § 1.131
INVENTOR JENNY LOUIE-HELM

I, Jenny Louie-Helm, declare:

1. I am an inventor of the subject matter described in the patent application identified above. At the time of the present invention I was employed by Depomed, Inc., the assignee of the instant application, and I am still employed by Depomed Inc.

2. I have read the Office Action dated January 27, 2005, for this matter and I understand its contents. I also understand that the subject matter of this Declaration concerns the Examiner's rejection of the claimed invention over U.S. Patent No. 6,667,060 to Vandecruys et al. ("the '060 Patent").

3. I understand that because the September 28, 2001, international filing date of the '060 Patent is before the October 25, 2001, filing date of the instant application, that under 35 U.S.C. § 102(e), the '060 Patent may be eliminated as prior art against the claimed invention with evidence, such as witnessed notebook pages, that shows that the date of the present invention predates the international filing date of the '060 Patent.

4. Attached to this Declaration is a page from my laboratory notebook for this invention that was signed by me and witnessed at Depomed, Inc. on a date that predates not only the September 28, 2001, international filing date of the '060 Patent, but also the earliest March 20, 2000, filing date of the PCT Application from which the '060 Patent originated. Although the notebook page has been redacted

to hide the execution and witnessing dates, I am declaring herein that both the date of execution and the witnessing dates on the notebook page predate March 20, 2000, filing date of the PCT Application from which the '060 Patent originated.

5. At the middle of the first notebook page, formulas are provided for two dosage forms, i.e., #99012203 and #99012101, that were prepared according to the present invention; the dosage forms, which disintegrate *in vivo* within 4 hours and *in vitro* disintegration greater than 6 hours represent the claimed dosage form. The designation "T-2" represents the topiramate gastric retentive oral dosage form. At the bottom of the first notebook page, three different formulations are provided based upon the *in vitro* and *in vivo* disintegration profiles of the #99012203 and #99012101 dosage forms: 16 mg formulations in a 600 mg tablet; 256 mg formulations in an 800 mg tablet; and a 256 mg formulation in a 600 mg tablet that were prepared according to the present invention.

6. I declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, and that all statements made herein were made with the knowledge that willful false statements are punishable by fine, imprisonment, or both under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of any patent issuing from the instant application.

Dated: 01 JULY 2005

Jenny Louie-Helm

Jenny Louie-Helm

Project No. T-2

BOOK NO. 22414 TITLE FORMULATIONS FOR DT# 351+DS#11 16+256mg

m Page No.

Since we have a fair amount of information on the 128 mg / 600mg tabl th respect to in vitro disintegration times, we need to look at th her strengths. Fortunately, with the new formulations, it looks like we n keep all three lower strengths in a 600 mg tablet, that will swell efficiently for retention.

We will initially focus on the 16 + 256 mg strengths - the ends of th xotrum. We expect the 32 mg strength to be no different than the 16 rmulation.

There are 2 formulations we will try first, both disintegrated within 4h the dogs and lasted more than 6 hrs in vitro.

#99012203 21.33% T-2, 50% Polyox N-60K, 28.07% Avicel PH-101, 0.1% BHT, 0.5% disintegration ~4hrs in vivo, >6hrs in vitro (2@ dissolution ~41% @ 8hrs

#99012101 21.33% T-2, 30% Polyox 301, 48.07% Avicel PH-101, 0.1% BHT, 0.5% disintegration ~4hrs in vivo, >6hrs in vitro (2@40 dissolution ~42% @ 8hrs

The 16 mg formulations will be: 600mg tablet

99012801 2.67% T-2, 50% Polyox N-60K, 46.73% Avicel PH-101, 0.1% BHT, 0.5%

99012802 2.67% T-2, 30% Polyox 301, 66.73% Avicel PH-101, 0.1% BHT, 0.5%

The 256-mg formulations will be - 800 mg tablet

99012803 32% T-2, 50% Polyox N-60K, 17.4% Avicel PH-101, 0.1% BHT, 0.5

99012804 32% T-2, 30% Polyox 301, 37.4% Avicel PH-101, 0.1% BHT, 0.5% ms

We will also try the 256 mg formulation in a 600 mg tablet

99012805 42.67% T-2, 50% Polyox N-60K, 6.73% Avicel PH-101, 0.1% BHT, 0.

To Page No

itnessed & Understood by me,	Date	Invented by	Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Jenny Louie-Helm et al.

Confirmation No.: 1055

Serial No.: 10/014,750

Group Art Unit: 1615

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Examiner: Blessing M. Fubara

Title: FORMULATION OF AN ERODIBLE, GASTRIC RETENTIVE ORAL DOSAGE FORM USING IN VITRO DISINTEGRATION TEST DATA

DECLARATION UNDER 37 C.F.R. § 1.131
INVENTOR BRET BERNER, PH.D.

I, Bret Berner, declare:

1. I am an inventor of the subject matter described in the patent application identified above. At the time of the present invention I was employed by Depomed, Inc., the assignee of the instant application, and I am still employed by Depomed, Inc.

2. I have read the Office Action dated January 27, 2005, for this matter and I understand its contents. I also understand that the subject matter of this Declaration concerns the Examiner's rejection of the claimed invention over U.S. Patent No. 6,667,060 to Vandecruys et al. ("the '060 Patent").

3. I understand that because the September 28, 2001, international filing date of the '060 Patent is before the October 25, 2001, filing date of the instant application, that under 35 U.S.C. § 102(e), the '060 Patent may be eliminated as prior art against the claimed invention with evidence, such as witnessed notebook pages, that shows that the date of the present invention predates the international filing date of the '060 Patent.

4. I have read the Declaration of Inventor Jenny Louie-Helm and I have viewed the unredacted notebook page attached thereto. I agree fully with the statements made by Inventor Jenny Louie-Helm in her Declaration and as the co-inventor of the present invention, I confirm that the date of invention as

evidenced in the redacted notebook pages attached to the Declaration of Inventor Jenny Louie-Helm predate the March 20, 2000, filing date of the PCT Application from which the '060 Patent originated.

5. I declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, and that all statements made herein were made with the knowledge that willful false statements are punishable by fine, imprisonment, or both under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of any patent issuing from the instant application.

Dated: 6/29/05

Bret Berner, Ph.D.